Interface Test Description

CalHEERS-Carrier Interfaces

June 21, 2013

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1.1. Interface Test Description – CalHEERS – Carrier Interfaces

This Interface Test Description outlines the testing aspects of the interfaces between CalHEERS and its carriers. This document is the primary input for interface related test scripts that are created in ALM-Application Lifecycle Management. This work product is part of the Interface Testing Preparation activity.

Interface Details	
Interface Name	CalHEERS- Carrier Interface
Release	
Test Phase	System Test, End-to-End Test
Business Partner	Carrier

1.2. Interface Testing Participant List

The table listed below provides the list of CalHEERS, Accenture Team, and Carrier resources. Any corrections and updates, please email to Adora Pham and cc Debra Leung.

Table 1.2
Carrier/Covered CA TEAM MEMBERS

Organization	Area	Function	Name	Phone	Email	Location
Carrier		Test lead – Individual				
Carrier		Test lead - SHOP				
Carrier						
Carrier						
Carrier						
Carrier						
Covered CA		Plan Management	Sue Oliver	916-323-3736	Susan.Oliver@covered.ca.gov	Sacramento
CALHEERS		Plan Management	John Renzelman	214-909-4761	john.n.renzelman@calheers.ca.gov	Sacramento
CALHEERS		Plan Management/EDI 834/820	Mekdes Getahun	310-692-5783	Mekdes.M.Getahun@calheers.ca.gov	Sacramento
CALHEERS		Plan Management	Sharon Brunberg	916-999-2576	Sharon.Brunberg@calheers.ca.gov	Sacramento
CALHEERS		Test Lead	John Finnegan	916-834-6021	John.Finnegan@calheers.ca.gov	Sacramento
CALHEERS		Interface Test Lead	James Kane	916-999-2387	james.kane@calheers.ca.gov	Sacramento
CALHEERS		Data Team Lead	Shruti Gadhok	916 743-0999	shruti.gadhok@calheers.ca.gov	Sacramento

Primary-Carrier plays important role on testing process and works closely with Accenture team during the testing process.

Organization	Area	Function	Name	Phone	Email	Location
CALHEERS		Test Support	Debra Leung	916 999-2375	debra.leung@calheers.ca.gov	Sacramento
CALHEERS		Test Support	Adora Pham	916 999-2344	Adora.h.Pham@calheers.ca.gov	Sacramento
CALHEERS		UAT Lead	Cheryl Hofmann	916-999-2563	cheryl.hofmann@calheers.ca.gov	Sacramento
CALHEERS		UAT	Singh Jatinder		jatinder.singh@calheers.ca.gov	Sacramento
CALHEERS		Secure Communication	Kalpesh Shah	973-960-2471	kalpesh.x.shah@calheers.ca.gov	Sacramento
CALHEERS		Secure Communication	Bill Draven		bill.draven@calheers.ca.gov	Sacramento
Covered CA		Financial Management	Sheila Taylor		sheila.taylor@covered.ca.gov	Sacramento

1.3. Interface Description

The CalHEERS-CARRIER interfaces operate as a bi-direction bridge enabling the exchange of information of Individual/SHOP between CalHEERS and the carrier's system with these purposes:

- Provide a seamless enrollment process between CalHEERS and the individual carrier's system.
- Reconcile enrollment information between CalHEERS and the carrier
- Provide individual and SHOP payment information

The information exchanged covers the areas:

- Enrollment information – New enrollments, updates to existing enrollments and dis-enrollment for individual and SHOP.

- Enrollment Reconciliation – Monthly full enrollment file to be used in reconciling CalHEERS with carrier's system

- Individual Payments – Carrier will send payment information for individuals daily so that it can be stored and viewed in CalHEERS information to the carrier.

- SHOP Payments – Carriers will send payment information for individuals daily so that it can be stored and viewed in CalHEERS.

The interface transactions are done by a numbered batch program to send out and receive documents through the CalHEERS FTP Server. The table below indicates batch service operation related to each interface transaction which will be implemented at CalHEERS.

Related Interface	Interface Name (ID)	Business Function General Description	Interchange Acknowledgement (EDI TA1)	Transaction O-Out bound file I-In bound file	Frequency D-Daily M-Monthly
EDI 834	Enrollment – Updates (1)	EDI 834 document placed on CalHEERS FTP server used to communicate individual and SHOP enrollment information for new enrollments, updates to existing enrollments and disenrollment so that issuers can update their systems. This is an incremental update. There will be 2 files created for each issuer: one with individual enrollments and one for SHOP enrollments. The files will only be created if there are new enrollments or enrollment changes associated with the issuer that occurred on that.	R	O	D
EDI 834	Enrollment Confirmations / Dis-enrollment (4)	EDI 834 document placed on the CalHEERS FTP server confirming enrollments or sending disenrollment for nonpayment (cancellation or termination). This is an incremental update.	S	I	D

Primary-Carrier plays important role on testing process and works closely with Accenture team during the testing process.

Related Interface	Interface Name (ID)	Business Function General Description	Interchange Acknowledgement (EDI TA1)	Transaction O-Out bound file I-In bound file	Frequency D-Daily M-Monthly
EDI 834	Enrollment -/ Reconciliation (7)	EDI 834 document placed on CalHEERS FTP server used to communicate current individual and SHOP enrollment information on a monthly basis used for audit reconciliation purposes so that issuers can find discrepancies in their systems. This is the full book of business listing everyone currently enrolled for the issuer. There will be 2 files created for each issuer: one with individual enrollments and one for SHOP enrollments.	R	O	M
EDI 820	Individual Payments (11)	EDI 820 document placed on the CalHEERS FTP server used to communicate payment information for individual payments to the issuers. This is an incremental update.	S	I	D
EDI 820	Shop Payments (14)	EDI 820 document placed on the CalHEERS FTP server used to communicate SHOP payment information to issuers for remittance purposes.	R	O	D
EDI 999	Implement Acknowledge (3, 16)	EDI 999 document placed on the CalHEERS FTP server acknowledging receipt of the Enrollment-Updates EDI 834 document (ID=3). EDI 999 document placed on the CalHEERS FTP server acknowledging receipt of the SHOP Payments EDI 820 document (ID=16).		I	D
EDI 999	Implement Acknowledge (6,13)	EDI 999 document placed on the CalHEERS FTP server acknowledging receipt of the Enrollment Confirmations/Disenrollment EDI 834 document from the Issuer (ID=6). EDI 999 document placed on the CalHEERS FTP server acknowledging receipt of the Individual Payments EDI 820 document from the Issuer (ID=13).		O	D
EDI 999	Implement Acknowledge (9)	EDI 999 document placed on the CalHEERS FTP server acknowledging receipt of the Enrollment-Reconciliation EDI 834 document by the Issuer.		I	M
EDI TA1	Interchange Acknowledgement (2, 15)	EDI TA1 document placed on the CalHEERS FTP server used to verify the syntactical accuracy of the envelope of the X12 interchange.		I	D

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Related Interface	Interface Name (ID)	Business Function General Description	Interchange Acknowledgement (EDI TA1)	Transaction O-Out bound file I-In bound file	Frequency D-Daily M-Monthly
EDI TA1	Interchange Acknowledgement (5, 12)	EDI TA1 document placed on the CalHEERS FTP server used to verify the syntactical accuracy of the envelope of the X12 interchange.		O	D
EDI TA1	Interchange Acknowledgement (8)	EDI TA1 document placed on the CalHEERS FTP server used to verify the syntactical accuracy of the envelope of the X12 interchange.		I	M

Per Service Level Agreement frequency, TA1 and EDI 999 files must be received within 24 hours from the receiver after the EDI 834 is generated. In case if the sender doesn't receive the TA1 and EDI 999, the sender needs to call the receiver to follow up and the EDI 834 file might need to be re-send.

1.4. Test Approach

The CalHEERS Interface Test Team has created test cases based on the business functions listed above. Test scenarios are broken out by each interface transaction, which includes creating separate test cases for each interface associated with the Batch Processing (in instances where there is overlap within the areas).

Certification Testing will focus on verifying each carrier's ability to process inbound transactions and generate appropriate responses. A CalHEERS testing resource will work with a carrier to identify a testing window. A total of approximately 25 – 30 test cases developed during the initial Carrier Interface test phase will be repurposed for certification testing. Certification testing is scheduled to begin on August 5 and continue through October 25. Connectivity setup and testing will begin approximately 3 to 4 weeks prior to interface testing.

The following items address the approach CalHEERS and the Carrier will use during Interface setup and testing:
- A Partner Trading Agreement between the Carrier and CalHEERS will be submitted to the carrier for signature prior to the start of connectivity setup.
- Carrier will provide testing environment information.
- Test cases have been set up to utilize time shifting capabilities. Carrier will need to inform CalHEERS if their testing environment is unable to support future dating.
- The Carrier will need to confirm the ability to reset to a data baseline.
- Any issues or questions that arise during the testing can be directed to individual contact for quick response.

1.5. Interface Partner Participation

The table below indicates each task that is required from business partners.

Task/Partner	Carrier	CalHEERS	Accenture
Weekly interface testing discussions	Secondary	Secondary	Primary
Managing test environment(s)	Primary		Primary
Data requirements and design	Secondary		Primary
Design/develop Certification test cases	(Review)	(Review)	Primary
Design/develop Certification test scripts	(Review)	(Review)	Primary
Certification Interface testing	Primary*		Primary
Defect Management	Secondary		Primary

1.6. File Format / XML Schema

The plan management data collection will use the SERFF templates. The SERFF templates have embedded macros which will allow the issuers to validate data and finalize the form for submission. In order to load the QHP plans into CalHEERS as a prerequisite to Interface testing, the following templates will need to be filled out and submitted to the Exchange **by June 3, 2013**.

Template Name	Template Description	Download
Plan Benefit Design Templates		
Administrative Template	Collects general company and contact information.	Administrative Data Template
Network Template	Information identifying a provider's network.	Network Template
Service Area Template	Information identifying a plan's geographic service area.	Service Area Template
Plan/Benefit Template	Collects plan and benefit data and an add-in file.	Plans Benefits Add-In Plans Benefits Template
Plan Rate Template		
Rate Data Templates	Rating tables and supporting business rules.	Rates Template Business Rules Template

The Provider Network Input File layout can be found in the Provider Directory Implementation Guide. An updated version of the file layout will be included in the next version of this document.

Primary-Carrier plays important role on testing process and works closely with Accenture team during the testing process.

Version 1.5 of the 834 Companion Guide was provided by California Health Benefit Exchange on April 17, 2013 as a starting point for the interface. No version of the 820 Companion Guide has been provided and its availability date has not been published by CMS. Updated versions of the Electronic Data Interchange (EDI) transactions will be included in subsequent versions of this document.

1.7. Data Requirements

Testing Data provided by the Carrier should not contain production level Personally Identifiable Information (PII) unless the information is already provided to the general public through an outward facing portal page. Information that is acceptable includes Provider Name, Business Address, and Contact Information. Information that should be removed or obfuscated includes Social Security numbers, non-business related address data, and production rate data. However, mocked data is expected to closely resemble production data in structure and relationship to valid information.

Specific data requirements associated with individual test scripts will be identified and included in Section 1.11 Test Case Descriptions.

1.8. Testing Schedule

The following table is an example of the timeframes and activities to be used to coordinate scheduling. Specific schedules for individual carriers will differ based on confirmed connectivity, availability of testing resources and carrier staff.

See separate test schedule document until this ITD can be updated with it			

1.9. Communication Section

Primary communication during testing will be through Email or directly through phone. The contact information of all resources is identified in Table 1.2 Contact List. Carrier may request an ad hoc meeting to resolve larger concerns or issues.

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1.9.1. Test Metrics

Metrics will identify actual progress against expected results and will identify overarching issues that are preventing expected progress. See Figure 1.9.1below for tracking test execution.

Figure 1.9.1
Interface Testing Metric

Week #	Expected Scripts Executed	Actual Scripts Executed	Progress against Planned	Scripts passed	Cumulative Passed	Total # of Scripts	Percent Passed
1	10						
2	10						
3	10						

1.10. Defect Management

Accenture will be responsible for logging all new defects in ALM, the project's Defect Management tool. Defects associated with the Carrier's system should also be logged in the Carrier tool set. The Defect Management process CalHEERS will be using for the Carrier Interface testing is depicted below:

```
                                      ┌──────────┐
                                      │   New    │
                                      └────┬─────┘
                                           │
                                      ┌────▼─────┐
                                      │ Triaged  │◄──────────────────────────┐
                                      └────┬─────┘                           │
                                           │                                 │
                If CalHEERS    ◄═══════╪═══════►    If External BP           │
                  Issue                                Issue                 │
                                                                  External BP Says it is not
                                                                  issue on external system,
┌──────────────┐    ┌──────────┐              ┌──────────────────┐  Interface Test Lead/Tester
│   Pending    │◄───│ Assigned │◄──────────── │ Ext Assigned     │◄──does Pre-Triaging to
│  Rejection   │    └────┬─────┘              │    Carrier       │──►      confirm
└──────┬───────┘         │                    └────────┬─────────┘
       │            ┌────▼─────┐                        │
  Test Agree        │In Progress│              Defect is been Agreed by
       │            └────┬─────┘               External BP, Fixes the defect
┌──────▼───────┐   Assembly │          Failed  and Send the fix to Build
│   Rejected   │   Test Failed│       Testing of
└──────────────┘        │    ┌────▼─────┐  actual
                        │    │ Resolved │  defect on
   Tester               │    └────┬─────┘  CalHEERS
   does Not             │         │        Portal
   Agree                │    ┌────▼──────┐   │
       │                └────│In Assembly│   │   Failed testing of
       │                     │   Test    │   │   actual defect on
       │                     └────┬──────┘   │   External BP System
       │                     ┌────▼──────┐   │
       │                     │ Ready for │   │
       │                     │System Test│   │
       │                     └────┬──────┘   │
       │                     ┌────▼─────┐    │
       │                     │In Testing│◄───┴───────┐
       │                     └──┬────┬──┘            │
       │             Passed Testing │ Failed Testing │
       │                     │      │          ┌─────▼──────────┐
       │              ┌──────▼────┐ └─────────►│ Failed System  │
       │              │Passed     │            │     Test       │
       │              │System Test│            └────────────────┘
       └──────────────┴───────────┴──────────────────┘
```

***In case the existing defect is Passed and a new defect is found due to this defect, NEW Defect has to be raised and above process is followed.
The current defect should be Passed/blocked(in case the actual defect is blocked by New Defect)
***Status need to be configured from "Ext Assigned" status to "In Testing" status only for the defect that are identified as External BP defect

CalHEERS Defect Workflow
- Accenture tester will log the defect as per the Rule of Engagement and status of the defect is "*NEW*".
- Defect will be discussed in the Triage Meeting, and make the decision to move to defect to CalHEERS bucket if issue is with CalHEERS portal or the defect is moved to Carrier bucket if the issue found is with Carrier system. Status is "Triaged".

Defect Identified with CalHEERS Portal
- Defect is moved to "*Assigned*" status by the Test Lead/Release Manager.
- Developer fixes the issue and moves the status to "*Resolved*".
- Developer perform Assembly test for the defect that are in "*In Assembly Test*".
- If the Assembly test is passed, the status is moved to "*Ready for System Test*".
- If the Assembly test is failed, the status is moved back to "*Assigned*".
- Once the defect is moved to "*Ready for System Test*" during build process, the status of the defect is moved to "*In Testing*".

Primary-Carrier plays important role on testing process and works closely with Accenture team during the testing process.
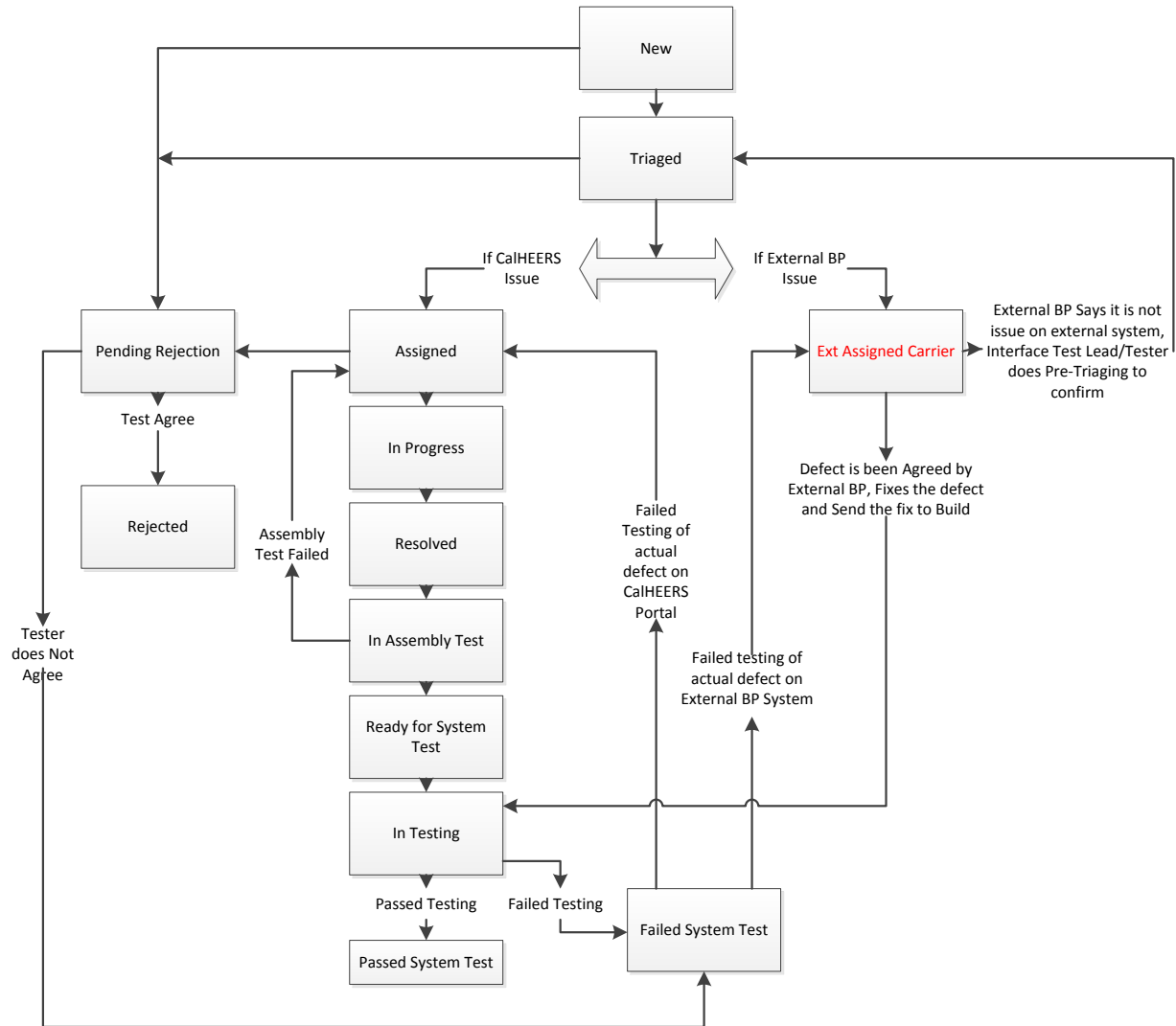
- At this stage tester is responsible to pick the defect which is in status "*In Testing*" and retest the defect on the build that is mentioned on the defect.
- Once the tester confirms the defect is fixed, tester changes the status to "Passed System Test" and follows the Rule of Engagement.
- If the tester confirms that the defect still exists, tester discuss with the CalHEERS developer and provide the required details as per Rule of Engagement and change the status to "*Failed System Test*".
- Defect is then moved to "*Assigned*" status.
- Defect goes to "*Pending Rejection*" from status "New", "Triaged" and "Assigned" due to duplication of the defect, Function as Designed or Not Reproducible.
- CalHEERS tester will change the status to "*Rejected*" if they agree the Pending Rejection. If they do not agree on Pending Rejection then change the status to "Failed System Test".

In case the existing defect is passed and a new defect is been identified due to this defect, new defect is been raised with status "*NEW*" and the existing is moved to "*Passed System Test*".

Defect Identified with Carrier System
- After the Pre-Triage and the defect is identified as an Carrier system issue, the defect is moved to "*external Assigned*" status by the Test Lead/Release Manager.
- CalHEERS Interface tester should send all the information to Carrier team about the defect via email with the following details:
  - Issue log file
  - Screenshots
  - Interface file used to test
  - Contact Information: CalHEERS tester Phone and Email
  - Reports of the defect that contains
    - Detected by
    - CalHEERS Defect ID
    - Detected on Date
    - Status
    - Impact
    - Priority
    - Severity
    - Workaround
    - Environment
    - Interface Partner
    - Blocking Defect
    - Summary
    - Steps to Reproduce
    - Expected Results
    - Actual Results

Primary-Carrier plays important role on testing process and works closely with Accenture team during the testing process.
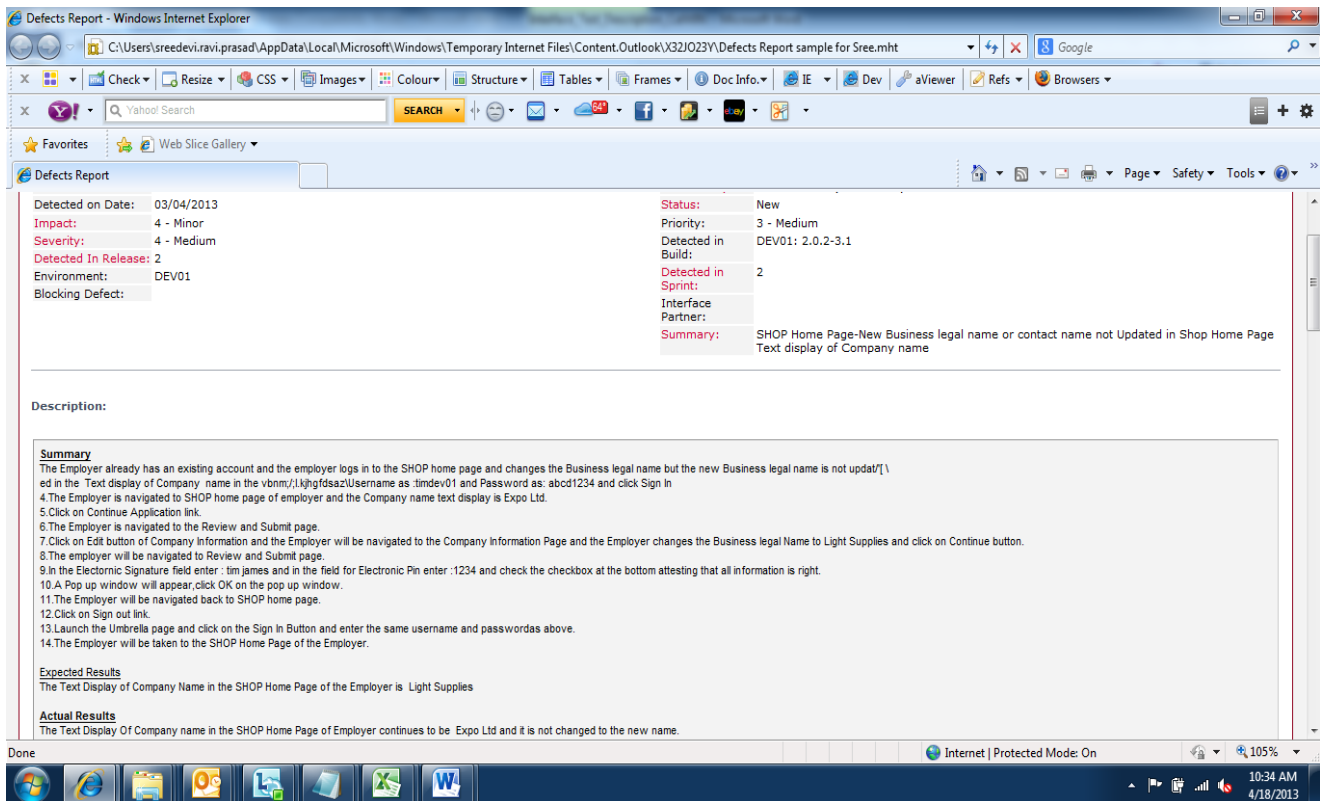
- Carrier team will acknowledge receipt of email with CalHEERS in regards to opening a defect on Carrier side or the rejection of the defect (process is mentioned below) within a 24hr turnaround time.
- Carrier will communicate the defect id for tracking purposes.
- Carrier will address the defect based on the priority set for each defect and communicate the turnaround time to the CalHEERS tester/test lead via email. Accenture expects the turnaround time for the majority of defects to be one week or less.
- CalHEERS tester will enter the Carrier defect id in ALM for tracking purposes.
- Developer from the Carrier team fixes the issue and informs the CalHEERS Interface tester and Test lead via Email with the following details for Carrier defects.
    o   Carrier defect ID
    o   Defect Resolution
    o   Supporting documentation
    o   Screenshots of the fix
    o   Defect fixed by
    o   Contact Information: Carrier tester and developer - Phone and Email
- At this stage CalHEERS tester/test lead should change the status of defect to "_In Testing"._
- Once the tester confirms the defect is fixed, tester changes the status to "_Passed System Test_" and follows the Rule of Engagement.
- If the tester confirms that the defect still exists, tester discuss with the Carrier developer /tester and provide the required details as per Rule of Engagement and change the status to "_Failed System Test_".
- Defect is then moved to "_external Assigned_" status.

Primary-Carrier plays important role on testing process and works closely with Accenture team during the testing process.

If the Carrier developer determines that the defect has not been caused by the Carrier system:

- Inform the CalHEERS tester and Test lead via email with rejection reason, supporting document for rejection, screenshots
- CalHEERS tester/test lead and Carrier team will perform pre-Triage of the defect and identify the actual cause of the defect, providing additional information to support the defect.
- If identified after discussion it is an issue with the Carrier system, reassign the defect back to the Carrier team with supporting documentation
- If identified after discussion it is issue with CalHEERS system, CalHEERS tester is responsible to update the defect based on the triage conversation between CalHEERS tester and Carrier team. CalHEERS tester should attach all appropriate documentation to the ALM defect.
- Defect is moved to "Triaged" status and defect will be discussed in the CalHEERS Triage meeting in order to assign the defect to the appropriate team.

1.11. Test Case Description

Please see Appendix A - ITD Test Scenarios.

1.12. Important Links

EDI 820 – Companion Guide is expected to be available on June 28 and can be accessed through same location as EDI 834 on the Exchange website.

[EDI 834 – Companion Guide, Version 1.5](#)